



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/707,907

01/23/2004

Michael Ben Sellers

139773

1906

23413 7590 05/16/2008

CANTOR COLBURN, LLP
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER

WEATHERBY, ELLSWORTH

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

05/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/707,907	Applicant(s) SELLERS, MICHAEL BEN	
	Examiner ELLSWORTH WEATHERBY	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 12-15, 17, 18 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-15, 17, 18 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 1/18/2007, with respect to the rejection(s) of claim(s) 1-8, 12-15, and 17-18 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4, 12-15, 17, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz et al. (USPN 6,642,717).

Dietz et al. '717 teaches a gradient tube extending along an axis, the tube including first and second gradient coils (abstract; col. 2, l. 35- col. 3, l. 30), the conductive compound being a glue having a plurality of conductive particles therein, at least a portion of the plurality of conductive particles being in the range of 1-10 micrometers in diameter configured to limit a current flowing through the device (col. 3, ll. 11-30); Dietz et al. '717 also teaches using an epoxy resin (claim 4). Dietz et al. '717 further teaches adding a hardening component (col. 3, ll. 52-55)

Although Dietz et al. '717 suggests reducing currents (col. 1, ll. 10-30), Dietz et al. '717 does not expressly teach that the conductive compound is configured to limit the current flowing through to less than 10 microamps to reduce electrostatic discharges in the glue. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dietz et al. '717 to limit the current flowing through to less than 10 microamps. The motivation to modify Dietz et al. '717 would have been to provide a highly sensitive system with appropriate noise reduction, as taught by Dietz et al. '717 (col. 1, ll. 10-30; col. 2, ll. 1-24).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz et al. (USPN 6,642,717) as applied to claim 1 above, and further in view of Doty (USPN 5,530,355).

5. Dietz et al. '717 teaches all the limitations of the claimed invention except for expressly teaching that the conductive particles comprise carbon particles.

6. In the same field of endeavor, Doty '355 teaches using carbon particles in a shielded coil system (col. 14, l. 57- col. 15, l. 13).

7. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dietz et al. '717 in view of Doty '355. The motivation to modify Dietz et al. '717 in view of Doty '355 would have been to aid in casting or curing, as taught by Doty '355 (col. 14, l. 57- col. 15, l. 13).

8. Claims 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz et al. (USPN 6,642,717) as applied to claims 2 and 22 above, and further in view of Lehne et al. (USPN 5,235,283).

Dietz et al. '717 teaches all the limitations of the claimed invention except for expressly teaching that the epoxy resin comprises a bisphenol-A resin.

In the same field of endeavor, Lehne et al. '283 teaches using biphenol-A resin in an epoxy resin (col. 4, ll. 39-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dietz et al. '717 in view of Lehne et al. '283. The motivation to modify Dietz et al. '717 in view of Lehne et al. '283 would have been to aid in casting or curing, as taught by Lehne et al. '283 (col. 4, ll. 39-58).

9. Claims 6-8, 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz et al. (USPN 6,642,717) as applied to claims 1, 17 and 21 above, and further in view of Wang et al. (Pub. No.: 2004/0225213).

Dietz et al. '717 teaches all the limitations of the claimed invention except for expressly teaching that the glue comprises a polyester resin.

In the same field of endeavor, Wang et al. '213 teaches as known in the art using a polyester compound in a glue [0242].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dietz et al. '717 in view of Wang et al. '213. The motivation to modify Dietz et al. '717 in view of Wang et al. '213 would have been to select any glue mixture

from a finite list of well known glue mixtures commonly used in the art with reasonable expectations of success, as taught by Wang et al. '213 [0242].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLSWORTH WEATHERBY whose telephone number is (571) 272-2248. The examiner can normally be reached on M-F 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art
Unit 3737

Application/Control Number: 10/707,907
Art Unit: 3737

Page 6

EW